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PATENT
Docket No. SJO920010010US1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant:	Michael K. Larkin	
Serial No.:	10/050,411	
		Group Art Unit: 2143
Filed:	January 16, 2002	
For:	INTELLIGENT SYSTEM CONTROL AGENT FOR MANAGING JOBS ON A NETWORK BY MANAGING A PLURALITY OF QUEUES ON A CLIENT	
Examiner:	Joseph E. Avellino	

APPEAL BRIEF

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Examiner:

Appellant filed a timely Notice of Appeal on November 7, 2005, in response to the Final Office Action mailed July 7, 2005, and the Advisory Action mailed October 10, 2005. Appellant appeals the rejection of and objections to pending claims 1, 2, 4-17, 19-21, 23-28, and 30-36. This Appeal Brief is being filed under the provisions of 37 C.F.R. § 41.37. The filing fee set forth in 37 C.F.R. § 41.20(b)(2) of $500.00 is to be charged to Deposit Account No. 09-0466. The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication, or to credit any overpayment, to Deposit Account No. 09-0466.

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Comments:

1. REAL PARTY IN INTEREST

The real party in interest is the assignee, International Business Machines Corporation, Armonk, New York.

2. RELATED APPEALS AND INTERFERENCES

There are no related appeals, interferences, or judicial proceedings.

3. STATUS OF CLAIMS

The Final Office Action rejected Claims 1, 2, 4-17, 19-21, 24-28, 30, 31, and 33-36 and objected to claims 23 and 32. Claims 1-2, 4-12, 14-22, 24, 26-31, and 33-36 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,128,642 to Doraswamy *et al.* (hereinafter "Doraswamy") in view of U.S. Patent No. 6,813,767 to Willke (hereinafter "Willke"). Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Doraswamy in view of Willke and further in view of U.S. Patent No. 6,711,616 to Stamm *et al.* (hereinafter "Stamm"). Claim 25 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Doraswamy in view of Willke and further in view of U.S. Patent No. 6, 192,388 to Cajolet (hereinafter "Cajolet).

According to the Advisory Action mailed October 11, 2005, the claims remain rejected and objected to as set forth in the final rejection. The Advisory Action notes that the proposed amendments are not entered because these amendments are asserted to require further consideration and a new search of the prior art. Appellant appeals the rejection of Claims 1, 2, 4-17, 19-21, 24-28, 30, 31, and 33-36 and objection of Claims 23 and 32.

4. STATUS OF AMENDMENTS

Appellant proposed amendments in an amendment and response mailed September 7, 2005. These amendments were not entered because it is asserted that they would require further consideration and a new search.

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5. SUMMARY OF CLAIMED SUBJECT MATTER

The claimed subject matter deals with computer systems for coordinating, distributing, and managing other software programs on a network. *See* Spec. page 1, lines 4-6. Specifically, the claimed invention comprises a system control agent configured to communicate with at least one client over a network. *See* Spec. page 11, lines 15-23. Each client may include execution queues, queue monitoring modules, and various other communication channel modules. *See* page 12, lines 1-3. The system control agent manages jobs over the network with multiple clients. The system control agent (hereinafter "agent") may rely on one or more criteria for making a determination of which client to send a job to. For example, the agent may determine which of the clients possess the hardware and software necessary to process the job or request. The agent is also configured to determine which of the clients is least busy or otherwise in the best position to service the request. *See* page 16, lines 15-22.

A disadvantage of current software control agents is the generally limited capability of the agent with respect to managing and monitoring the state of current job requests. Furthermore, current software control agents provide no mechanism for providing manual or automatic relocation of an entire agent and job request. This lack of mobility often results in incomplete and/or unsuccessful job request completion. *See* page 4, lines 5-9.

Additionally, current systems are hampered by the inability to prioritize job requests. For example, consider the situation in which a system administrator submits a job request to be carried out by a client station within a network. The agent receives the job request and then selects which client to submit the job request to. The client selected may already have numerous job requests waiting in the queue which need to be completed. The newly submitted request will remain on the clients' queue until previously submitted requests are completed. This poses a serious problem if the newly submitted job request is of high importance and needs to be completed immediately. *See* page 3, lines 19-25.

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Embodiments of the present invention include an apparatus, a system and a method for managing jobs on a network.[1] See e.g. Claims 1, 8, and 15.

The following references are illustrative of an embodiment of an apparatus. *See* Claim 1. The apparatus includes a user interface module configured to receive a user request. *See* Claim 1. A client selection module configured to select one of a plurality of clients to service the user request according to a predetermined criterion, each client comprising a plurality of queue types, each queue type having an individual scheme for prioritizing jobs. *See* Claim 1. The apparatus also includes a communication module configured to submit the user request to the selected client. *See* Claim 1.

Figure 2 illustrates one embodiment of a system control agent 200 and a client 202 as claimed. Each may include a plurality of modules containing executable code and operational data suitable for operation by the CPUs 16 and storage within the memory devices 18 of Figure 1. *See* page 11, lines 16-18. The agent 200 generally comprises an agent endpoint module 204, a storage mechanism module 206, a federation module 208, a communication module 210, a state storage module 212, a system health check module 214, a registration module 216, and various other communication channel modules 218. *See* page 11, lines 24-27. The client 202 comprises job execution queues 220, a queue-monitoring module 222, a communication module 224, a status module 226, and various other communication channel modules 228. *See* page 13, lines 1-3. *See also* Figure 2.

The system of Claim 8 includes substantially the same subject matter as that described above in relation to Claim 1. *See* Claims 1 and 8. The method of Claim 15 and the article of manufacture of Claim 26 include substantially the same elements as those described above in relation to Claim 1. *See* Claims 1, 15, and 26.

In summary, the claimed invention discloses a robust intelligent system control agent configured to receive user job requests, submit the user job requests to selected qualified clients for servicing, and monitor the progress of the requests. The system is also configured with the

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[1] Although Appellant has summarized embodiments of the present invention, the present invention is defined by the claims themselves. Appellant's summary is not intended to limit the scope of the claims or individual claim elements in complying with the appeal brief requirements under 37 C.F.R. § 41.37(c)(v).

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capability of relocating a system control agent from one location within a network to another location within the network and for relocating a job request from one client to another. This ability to relocate agents and jobs provides robustness and reliability to the system, allowing the agent to move to a different machine when, for example, its current host system requires maintenance or other downtime. In order to facilitate the relocation of a job request, the state of the request is temporarily stored by the agent or by other means while the job request is relocated to another client. The system also includes the plurality of queues for handling the job or user requests. Each queue may have a different scheme for job prioritization.

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6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

I.   Whether amendments to the Specification and Drawings filed June 9, 2005 introduce new matter.

II.   Whether the Examiner failed to establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a) for Claims 1-2, 4-12, 14-22, 24, 26-31, and 33-36 where the limitations of the claims are not taught or suggested within the combination of cited references and no motivation to make the combination exists.

III.   Whether Appellant's amendment filed on September 7, 2005 fails to place the claimed invention in condition for allowance, and more specifically whether the amendments placing allowable dependent claims in independent form would require further consideration and a new search.

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7. ARGUMENT

I.   The Examiner improperly rejected amendments to the Specification and Drawings filed June 9, 2005 for introducing new matter.

Amendments to the Specification objected to under 35 U.S.C. § 132(a)

A.   Amendments to the Specification and Drawings.

Appellant respectfully submits that the inserted language (language in dispute shown underlined) of the following paragraphs does not constitute new matter:

Page 11, line 24:

In the depicted embodiment of Figure 2, the agent 200 generally comprises a user interface module 203, an agent endpoint module 204, a client selection module 205, a storage mechanism module 206, a federation module 208, a communication module 210, a state storage module 212, a system health check module 214, a registration module 216, and various other communication channel modules 218, and a job relocation module 219.

Page 12, line 1:

In the depicted embodiment of Figure 2, the client 202 generally comprises job execution queues 220, a job execution module 221, a queue-monitoring module 222, a communication module 224, a status module 226, and various other communication channel modules 228. Additionally, the client 202 may be coupled to a stub software module 229.

Page 13, line 24:

In one embodiment, the client modules comprise job execution queues 220 and a job execution module 221. The job execution module 221 may determine which type of job execution queue might be used to process a particular user request. The job execution queues 220 may comprise various types of job execution queues. In the depicted embodiment, the job execution queues 220

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comprise an asynchronous queue, a synchronous queue, and an exclusive queue. A job execution queue 220 may also be configured to maintain several types of each queue previously mentioned. However, a job execution queue 220 is configured to maintain a maximum of one exclusive queue for each client. Figure 3 shows one example in which a job execution queue 220 comprises all three types of queues.

Figure 2:

The user interface module 203, the client selection module 205, and the execution module are purportedly supported only by the inserted language as shown above.

B. The Objection under 35 U.S.C. § 132(a)

35 U.S.C. § 132(a) states that no amendment shall introduce new matter into the disclosure of the invention.

C. Withdrawal of the Objection under 35 U.S.C. § 132(a)

Appellant respectfully asserts that the language inserted into the Specification and the replacement of Figure 2 do not constitute the introduction of new matter. Information contained in any one of the specification, claims or drawings of the application as filed may be added to any other part of the application without introducing new matter. *See* MPEP § 2163.06. The MPEP provides Examiners with further guidance on this issue when stating (emphasis added):

> The claims as filed in the original specification are part of the disclosure and therefore, if an application as originally filed contains a claim disclosing material not disclosed in the remainder of the specification, **the appellant may amend the specification to include the claimed subject matter.** *In re Benno*, 768 F.2d 1340, 226 USPQ 683 (Fed. Cir. 1985).

See MPEP § 2163.06(II).

First, referring to the amendment to page 11, starting on line 24, the Examiner objected to the insertion of a user interface module 203, a client selection module 205, and a job relocation

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module. The user interface module is first referenced in originally filed Claim 1 which states (emphasis added), "a **user interface module** configured to receive user requests." *See* Claim 1. The client selection module 205 is likewise disclosed in originally filed claim 1. *See* Claim 1. The job relocation module 219 is first referenced in Claim 6. *See* Claim 6.

Referring now to page 12, paragraph starting on line 1, the Examiner objected to the insertion of the phrase "the client comprises a job execution module 221 and that the client 202 may be coupled to the stub software module 229. The job execution module 221 is first referenced in Claim 9. *See* Claim 9. The stub software module 229 is first referenced in claim 13 which states, "a stub software module configured to control execution of a request residing on a specified client." *See* Claim 13. The stub software module is clearly coupled with the client if the stub software module is configured to control the execution of a request residing on a client.

Referring now to page 13, paragraph starting on line 24, the Examiner objected to the insertion of the phrase "the client module comprises a job execution module 221 which may determine which type of job execution queue might be used to process a particular user request." Claim 9 recites in pertinent part, "...a job execution module configured to determine a suitable queue for each request sent to the client." *See* Claim 9. In other words, the job execution module is configured to determine which type of queue should be used to process a particular user request.

The Examiner objected to the amendments to Figure 2. Specifically, the Examiner objected to the insertion of the user interface module 203, the client selection module 205, and the job execution module 221. The Examiner asserted that the added modules 203, 205, and 221 are only supported by the new matter objected to, Appellant respectfully disagrees.

For the reasons cited above, the user interface module 203, client selection module 205, and job execution module 221 may be inserted into the Specification and the Drawings because they are disclosed in the originally filed claims. Therefore, the objection by the Examiner based on 35 U.S.C. § 132(a) is improper, and the above described elements may be inserted into both the Specification and the Drawings. Appellant respectfully requests the withdrawal of the objection based on 35 U.S.C. § 132(a).

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II.   **The Examiner failed to establish a _prima facie_ case of obviousness under 35 U.S.C. § 103(a) because the cited references, either alone or in combination, do not teach or suggest all of the limitations of Claims 1-2, 4-12, 14-22, 24, 26-31, and 33-36 and no motivation to make the combination exists.**

INDEPENDENT CLAIMS 1, 8, 15, and 26

A.   Independent Claims 1, 8, 15, and 26

Independent Claims 1, 8, 15, and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Doraswamy in view of Willke. It is well settled that the PTO has the burden to establish a _prima facie_ case of obviousness. _See In re Glaug_, 2002 U.S. App. Lexis 4246, *4 (Fed. Cir. March 15, 2002); MPEP §2142. "To establish _prima facie_ obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." _See_ MPEP §2143.03 (emphasis added). The Federal Circuit has held that "the 'subject matter' that must have been obvious to deny patentability under §103 is the entirety of the claimed invention." _See Panduit Corp. v. Dennison Mfg. Co._, 810 F.2d 1561, 1576 (Fed. Cir. 1987). Furthermore, even if all the claim limitations are taught or suggested, there must be some suggestion or motivation to combine reference teachings. _See_ MPEP §2142. Applicant respectfully asserts that a _prima facie_ case of obviousness has not been made because not all the elements recited in the claims are taught or suggested by the prior art and there is no teaching or suggestion in the art to produce the claimed invention.

The claimed invention teaches a plurality of computer stations connected by a network. _See_ Page 12, lines 11-13. A control agent and a plurality of clients are distributed across the computer stations. _See_ Page 12, lines 14-22. In addition, the control agent may be distributed across the computer stations. _See_ Page 12, lines 17-19. The control agent includes a user interface module that receives a user request. _See_ Page 11, lines 15-16; page 17, lines 5-6. The present application further discloses the control agent includes a client selection module that determines the nature of the request using predetermined criteria and selects a client. _See_ Page 17, line 13-17. Each client has **a plurality of queue types**. _See_ Page 13, lines 21-22. Exemplary queue types include asynchronous queues, synchronous queues, and exclusive queues. _See_ Page 13, lines 22-24. The present application teaches that each queue type has an

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individual scheme for job prioritization. *See* Page 15, lines 1-11. In addition, the control agent includes a communication module that submits the request to the client. *See* Page 13, lines 12-13; page 17, line 21.

In contrast, Doraswamy discloses a plurality of processing stations connected by a communications channel. *See* Doraswamy, FIG. 1; column 4, lines 20-23. The processing stations each communicate status announcements that include a load value that describes the processing load of each processing station. *See* Doraswamy, column 4, lines 56-59; column 5, lines 6-10. A processing station may select another processing station with a lower load value. *See* Doraswamy, column 6, lines 47-51. *See* Doraswamy further teaches the processing station determining the number of processing jobs to be remotely executed. *See* Doraswamy, column 7, lines 18-20. The processing station distributes processing jobs to the selected processing station in a very simple round-robin fashion. *See* Doraswamy, column 9, lines 35-54.

Willke teaches a central delayed transaction circuit that includes one or more transaction queues that store a transaction request. *See* Willke, FIGS. 1 and 2, ref 125. Each transaction queue may be of a plurality of types. *See* Willke, FIG. 3, ref. 312, 314. The transaction queue issues the transaction when a slot in an active stream context is available. *See* Willke, abstract.

With regard to claims 1, 8, 15, and 26, each of these claims recite selecting (emphasis added) "...one of a plurality of clients to service the user request according to a **predetermined criterion**, each client comprising a **plurality of queue types**, each queue type having an individual scheme for prioritizing jobs." Because Doraswamy lacks a plurality of queue types, or a method to service the user requests according to a predetermined criterion, these features must be found in Willke to support a rejection under 35 U.S.C. § 103(a). However, Willke teaches a central delayed transaction circuit that includes one or more transaction queues that store a transaction request. *See* Willke, FIGS. 1 and 2, ref 125. Willke, therefore, teaches away from queues distributed among a plurality of clients. Willke teaches "The technique is suitable for applications in peripheral component interconnect (PCI) host bridge components that emphasize read performance." *See* Willke, column 1, lines 63-65. Thus the present invention claims queues for each client receiving a user request while Willke teaches centralized queues. The distributed nature of the queues in the present invention sharply distinguishes the present

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invention from Doraswamy in view of Willke. Neither Doraswamy nor Willke teach or suggest distributed queues for each client. Willke teaches away from queues distributed among clients, teaching queues on a PCI host bridge. Furthermore, neither Doraswamy nor Willke teach servicing "the user request according to a predetermined criterion."

With regard to claims 1, 8, 15, and 26, the Examiner has not made a *prima facie* case that includes the claimed element of each client having one or more queues. The Examiner has also not made a *prima facie* case that suggests distributing the queues of Willke to the clients of Doraswamy. Absent each client having one or more queues, or a suggestion to distribute queues to the clients, Applicant respectfully asserts that claims 1, 8, 15, and 26 of the present invention cannot be obvious over Doraswamy in view of Willke and are therefore allowable.

DEPENDENT CLAIMS 2, 4-7, 9-12, 14, 16-22, 24, 27-31, and 33-36

A.   Claims 2, 4-7, 9-12, 14, 16-22, 24, 27-31, and 33-36

Given that Claims 2, 4-7, 9-12, 14, 16-22, 24, 27-31, and 33-36 depend from independent Claims 1, 8, 15, and 26 which are believed to be patentable as described above, Applicant respectfully submits that the rejection of Claims 2, 4-7, 9-12, 14, 16-22, 24, 27-31, and 33-36 under 35 U.S.C. § 103(a) is moot because Doraswamy and Willke fail to teach all the elements of the independent claims as explained above. Accordingly, Applicant requests that the rejection of dependent Claims 2, 4-7, 9-12, 14, 16-22, 24, 27-31, and 33-36 under 35 U.S.C. § 103(a) be duly withdrawn.

DEPENDENT CLAIM 13

B.   Dependent Claim 13

Dependent Claim 13 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Doraswamy in view of Willke and further in view of Stamm. Applicant respectfully asserts that that the Examiner has not made a *prima facie* case that includes a suggestion in Doraswamy, Willke, or Stamm to combine the teaching of stub software in Stamm with the teaching of Doraswamy and Willke. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on the applicant's disclosure. *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991), *from* MPEP § 2142.

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Stamm teaches away from submitting "...the user request to the selected client..." of the present invention. Instead Stamm teaches a client that requests tasks from a server. Stamm, column 3, line 57 to column 4, line 4. A client requesting a task is the antithesis of a "communication module" submitting "the user request to the selected client."

Because Stamm teaches away from the present invention, there is no suggestion in Doraswamy, Willke, or Stamm to combine Stamm with Doraswamy and Willke. Applicant respectfully asserts that claim 13 cannot be obvious over Doraswamy in view of Willke and Stamm and is allowable. In addition, claim 13 is allowable for depending from allowable claims.

In the Final Office action dated July 7, 2005, the Examiner upheld the rejection stating:

> As to point (2) the Office is not relying upon Stamm to teach the feature of submitting the user request to the selected client. Applicant will notice that Doraswamy discloses submitting the user request to the selected client (see rejection above). Furthermore the concept of automatically sending user requests to the selected client is well known in the art (see Doraswamy) and would just be an obvious design choice to have the client request tasks to execute or for the server to automatically push tasks to the client.

See Final Office Action, July 7, 2005. Here, the Examiner has listed claim limitations but has not identified a proper motivation or suggestion in the references themselves to combine reference teachings.

Furthermore, the combination of Stamm with either Doraswamy or Willke would render Stamm unsatisfactory for its intended purpose because Stamm teaches a client that requests tasks from a server. The Examiner treats this distinction lightly, merely stating this is a "design choice." *See* Final Office Action, July 7, 2005. However, there is a huge difference between pushing user requests onto a client rather than a client requesting the user requests. For example, one issue when pushing user requests is the possible presence of firewalls on the network. For this reason alone, many client-server applications implement a client that generates requests in

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order to bypass firewalls. It is difficult to implement client-server interactions, especially when the server pushes content or user requests to the client. This is not merely a "design choice."

Therefore, the Examiner has failed to establish a *prima facie* case of obviousness because the Federal Circuit has determined there is no suggestion or motivation to make a proposed modification if the modification would render the prior art unsatisfactory for its intended purpose. *See In re Gordon,* 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984), *from* MPEP § 2143.01 under the heading "**THE PROPOSED MODIFICATION CANNOT RENDER THE PRIOR ART UNSATISFACTORY FOR ITS INTENDED PURPOSE.**"

Therefore, the Examiner failed to establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a) because the cited references, either alone or in combination, do not teach or suggest all of the limitations of Claims 1-2, 4-12, 14-22, 24, 26-31, and 33-36 and no motivation to make the combination exists. Furthermore, the combination of the references would render the prior art unsatisfactory for its intended pupose.

III. The Examiner improperly rejected Appellants amendment filed on September 7, 2005 for an incorrectly perceived requirement of further consideration and a new search

Appellant filed an amendment on September 7, 2005, complying with requirements set forth by the Examiner in the Final Office Action dated July 7, 2005. The Appellant deleted objected to material from the specification and drawings **that did** have support in the originally filed claims. The Appellant also rewrote claims 23 and 32 in independent form such that they would be allowable, as requested by the Examiner. Appellant further amended the title of the invention to satisfy the Examiner.

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The Appellant's proposed amendments significantly narrowed the scope of the claims in order to place the invention in condition for allowance. However, the Examiner refused to enter the timely filed amendments. The Advisory Action states, "[t]he proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because they raise new issues that would require further consideration and/or search." *See* Advisory Action, October 11, 2005. The Examiner further states:

> Applicant has had previous opportunities before Final Rejection to incorporate the Allowable Subject Matter identified in the Non-Final Rejection, dated 2005/02/25. As such incorporating this into the independent claims would require further consideration and a new search of the prior art which has been issued or published and therefore raises new issues which fail to place this application in condition for allowance.
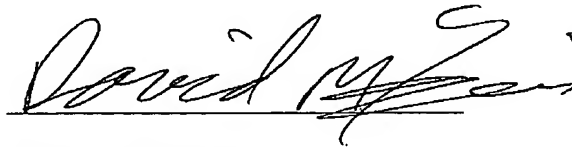
See Advisory Action, Continuation of 3, October 11, 2005. The MPEP states, "...amendments complying with objections or requirements as to form are to be permitted after final action in accordance with 37 CFR 1.116(b)." *See* MPEP § 714.12. The amendments made by Appellant and submitted on September 7, 2005 complied with the objections to Claims 23 and 32. The Appellant rewrote Claims 23 and 32 in independent form in reliance on the statement by the Examiner in the Final Office Action which says, "[c]laims 23 and 32 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112 2nd paragraph, set forth below in this Office action and to include all of the limitations of the base claim and any intervening claims." *See* Final Office Action, July 7, 2005. The Examiner stated that if Claims 23 and 32 were rewritten, the claims would be allowable. The Appellant complied with the Examiner, to Appellant's detriment.

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Furthermore, Appellant complied with the objections of form requiring the removal of inserted language from the June 9, 2005 amendment, even though the amendments are supported by original claims as filed. Again, the Appellant complied with the requirements of the Examiner to his detriment. The opportunity to rewrite claims 23 and 32 into independent form was presented in both the Non-Final Rejection, and the Final Rejection. As such, Appellant amended Claims 23 and 32. While the statement by the Examiner that "Applicant has had previous opportunities before Final Rejection..." may be true, the opportunity was also present in the Final Office Action. Appellant, therefore, respectfully asserts that the Examiner improperly refused to enter the amendments of September 7, 2005, which would have put the present case in condition for prompt allowance.

SUMMARY

In view of the foregoing, each of the claims on appeal has been improperly rejected because the Examiner has not properly established a *prima facie* case of anticipation or obviousness for independent Claims 1, 8, 15, and 26. Appellant submits that the foregoing arguments establish the novelty and non-obviousness of the claims of the present application. Therefore, Appellants respectfully request reversal of the Examiner's objections and rejections. Accordingly, Appellant submits that Claims 1, 2, 4-17, 19-21, 23-28 and 30-36 are patentable.

Respectfully submitted,

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8. CLAIMS APPENDIX

The claims involved in the appeal are listed below.

1.   An intelligent system control agent for coordinating user requested jobs among a plurality of clients, comprising:
a user interface module configured to receive a user request;
a client selection module configured to select one of a plurality of clients to service the user request according to a predetermined criterion, each client comprising a plurality of queue types, each queue type having an individual scheme for prioritizing jobs; and
a communication module configured to submit the user request to the selected client.

2.   The intelligent system control agent of claim 1, further comprising a system health check module configured to maintain an awareness of the state of the selected client.

3.   (Canceled)

4.   The intelligent system control agent of claim 1, further comprising an agent endpoint module configured to enable the relocation of the system control agent.

5.   The intelligent system control agent of claim 1, further comprising a federation module configured to allow cross-communication and interaction between a plurality of system control agents.

6.   The intelligent system control agent of claim 1, further comprising a job relocation module configured to relocate a user requested job from one client to another.

7.   The intelligent system control agent of claim 1, further comprising a state storage module configured to store the state of jobs being relocated from one client to another.

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8.   A system for remotely controlling clients from a central location, the system comprising:

    a plurality of clients;

    an agent configured to receive a user request from a user and determine based upon a predetermined criterion which of the plurality of the clients to submit the user request to, each client comprising a plurality of queue types, each queue type having an individual scheme for prioritizing jobs; and

    a communication channel configured to send the user request to the specified client.

9.   The system of claim 8, further comprising a job execution module configured to determine a suitable queue for the user request sent to the client.

10.   The system of claim 9, wherein the job execution module comprises an asynchronous queue configured to run requests simultaneously within the specified client.

11.   The system of claim 9, wherein the job execution module comprises a synchronous queue configured to run requests in the order the requests are received by the specified client.

12.   The system of claim 9, wherein the job execution module comprises an exclusive queue configured to run requests exclusive of any other requests in any other queue on the system.

13.   The system of claim 8, further comprising a stub software module configured to control execution of the user request residing on the specified client.

14.   The system of claim 13, wherein at least one of the clients is remote to the agent.

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15. A method of operating a software control agent, comprising:
receiving a user request;
automatically selecting based upon a predetermined criterion one of a plurality of clients to submit the user request to for service of the request, each client comprising a plurality of queue types, each queue type having an individual scheme for prioritizing jobs; and
sending the user request over a communication channel to the selected client.

16. The method of claim 15, further comprising automatically relocating a software control agent from one computer station within a network to another computer station within the network.

17. The method of claim 15, further comprising maintaining an awareness of the state of the selected client.

18. (Canceled)

19. The method of claim 15, further comprising providing an agent endpoint module configured to allow the mobility of an agent from one system to another.

20. The method of claim 15, further comprising communicating and interacting with a plurality of agents.

21. The method of claim 15, further comprising relocating a user requested job from one client to another.

22. (Canceled)

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23. The method of claim 16, wherein automatically relocating the agent from one computer system within the network to another computer system within the network further comprises:

instructing the agent to relocate to a known agent endpoint by a system administrator;

stopping to accept new job requests by the agent;

waiting for pending/current request relocations to finish by the agent;

flushing in-process requests to a state storage system by the agent;

requesting the new endpoint to instantiate a new agent by the agent;

waiting while the new agent populates its database with the data from the state storage system by the agent;

sending a message to all federated agents that the agent for a domain is relocated to the new agent by a first agent;

sending a message to all clients in the domain that the agent is relocated to the new agent by the first agent; and

sending a request to the first agent's endpoint to close the first agent by the new agent.

24. The method of claim 15, further comprising automatically relocating the user request from the selected client within a network to another client within the network.

25. The method of claim 24, wherein automatically relocating the user request from the selected client within the network to another client within the network further comprises:

instructing the selected client to relocate the user request by a system administrator or agent;

sending the user request to a state storage system by the selected client;

sending instructions to the new client to access the user request from the state storage system by the agent;

accessing the user request from the state storage system by the new client; and

relocating the user request to the new client.

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26 An article of manufacture comprising a storage medium readable by a processor and to perform a method of operating a software control agent, comprising:

receiving a user request;

automatically selecting based upon a predetermined criterion one of a plurality of clients to submit the user request to for service of the–user request, each client comprising a plurality of queue types, each queue type having an individual scheme for prioritizing jobs; and

sending the user request over a communication channel to the selected client.

27 The article of manufacture of claim 26, further comprising automatically relocating a software control agent from one computer station within a network to another computer station within the network.

28 The article of manufacture of claim 26, further comprising maintaining an awareness of the state of the selected client.

29 (Canceled)

30 The article of manufacture of claim 26, further comprising providing an agent endpoint module configured to allow the mobility of an agent from one system to another.

31 The article of manufacture of claim 26, further comprising automatically relocating a user requested job from one client within a network to another client within the network.

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32   The article of manufacture of claim 27, wherein automatically relocating the agent from one computer system within the network to another computer system within the network further comprises:

instructing the agent to relocate to a known agent endpoint by a system administrator;

stopping to accept new job requests by the agent;

waiting for pending/current request relocations to finish by the agent;

flushing in-process requests to a state storage system by the agent;

requesting the new endpoint to instantiate a new agent by the agent;

waiting while the new agent populates its database with the data from the state storage system by the agent;

sending a message to all federated agents that the agent for a domain is relocated to the new agent by a first agent;

sending a message to all clients in the domain that the agent is relocated to the new agent by the first agent; and

sending a request to the first agent's endpoint to close the first agent by the new agent.

33   The intelligent system control agent of claim 1, wherein each client comprises at least three queue types.

34   The system of claim 8, wherein each client comprises at least three queue types.

35   The method of claim 15, wherein each client comprises at least three queue types.

36   The article of manufacture of claim 26, wherein each client comprises at least three queue types.

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9. EVIDENCE APPENDIX

There is no material to be included in the Evidence Appendix.

10. RELATED PROCEEDINGS APPENDIX

There is no material to be included in the Related Proceedings Appendix.

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